

I. Amendments to the Claims

This listing of claims replaces without prejudice all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method of increasing the accuracy of a base station's estimate of estimating additional uplink transmit power available for a subscriber station that has ~~having~~ a radio that includes a power amplifier including foldback circuitry that monitors a current in said power amplifier indicative of actual uplink transmit power provided by said power amplifier to an antenna, said foldback circuitry operating to limit said monitored current to prevent said power amplifier from being driven over specification or being driven outside regulatory limits, said method comprising:

maintaining at said base station ~~a stored~~ an estimated value for allowable maximum uplink transmit power for said subscriber station;

tracking at said subscriber station incidents of foldback, an incident of foldback occurring whenever said foldback circuitry operates to limit said monitored current to prevent said power amplifier from being driven over

specification or being driven outside regulatory limits;

transmitting a foldback event message from said subscriber station to said base station whenever incidents of foldback tracked at said subscriber station reach a predetermined threshold;

decreasing said ~~stored~~ estimated value when said base station receives a foldback event message from said subscriber station;

increasing said ~~stored~~ estimated value when a predetermined interval of time has lapsed without said base station receiving a further foldback event message from said subscriber station; and

subtracting uplink transmit power reported by said subscriber station from said ~~stored~~ estimated value ~~when~~ to estimate additional uplink transmit power currently available to said subscriber station, when an accurate estimate of said additional uplink transmit power is required.

2. (Currently Amended) The method of claim 1, wherein said base station increases said ~~stored~~ estimated value in increments of substantially 1 dBm.

3. (Currently Amended) The method of claim 1, wherein said base station decreases said ~~stored~~ estimated value in increments of substantially 1 dBm.

4. (Currently Amended) The method of claim 1, wherein said predetermined interval of time is substantially 30 minutes.

5. (Previously Presented) The method of claim 1, wherein said predetermined threshold is reached when a preselected number of consecutive frames have been subject to foldback.

6. (Previously Presented) The method of claim 1, wherein said predetermined threshold is reached when said subscriber station has a foldback duty cycle of more than a predetermined amount over a predetermined period of time.

7. (Currently Amended) The method of claim 1 wherein said foldback event message includes an indication of the intensity of foldback imposed at said subscriber station and said base station decreases said ~~stored~~ estimated value by an amount proportional to the intensity of foldback.

8. (Currently Amended) A system for transmitting data comprising:

a plurality of subscriber stations each having a radio that includes a power amplifier including foldback circuitry that monitors a current in said power amplifier

indicative of actual uplink transmit power provided by said power amplifier to an antenna, said foldback circuitry operating to limit said monitored current to prevent said power amplifier from being driven over specification or being driven outside regulatory limits, and each operable to track incidents of foldback and to transmit a foldback event message whenever incidents of foldback tracked reach a predetermined threshold, an incident of foldback occurring whenever said foldback circuitry operates to limit said monitored current to prevent said power amplifier from being driven over specification or being driven outside regulatory limits; and

a base station operable to receive foldback event messages and to maintain ~~a stored~~ an estimated value for allowable maximum uplink transmit power for each said subscriber station, said base station decreasing said ~~stored~~ estimated value for a subscriber station when the base station receives a foldback event message from said subscriber station and increasing said ~~stored~~ estimated value for said subscriber station when a predetermined interval of time has lapsed without said base station receiving a further foldback event message from said subscriber station, said base station being configured to accurately estimate additional uplink transmit power currently available to said subscriber station by subtracting current transmit power

reported by said subscriber station from said ~~stored~~
estimated value for said subscriber station.

9. (Previously Presented) The system of claim 8,
wherein said base station adjusts ~~stored~~ estimated value in
increments of substantially 1 dBm.

10. (Previously Presented) The system of claim 8,
wherein said base station increases said ~~stored~~ estimated
value for said subscriber station after a predetermined
interval of time has lapsed without receiving a further
foldback event message from said subscriber station.

11. (Previously Presented) The system of claim 10,
wherein said predetermined period of time is substantially 30
minutes.

12. (Previously Presented) The system of claim 8,
wherein said predetermined threshold is reached when a
preselected number of consecutive frames have been subject to
foldback.

13. (Previously Presented) The system of claim 8,
wherein said predetermined threshold is reached when said
subscriber station has a foldback duty cycle of more than a

predetermined amount over a predetermined period of time.

Claims 14-25. (Cancelled)

26. (Previously Presented) The method of claim 1, wherein the stored value for allowable maximum uplink transmit power is the sum of the lower of a maximum rated power output of the subscriber station and a maximum rated power output set by regulation and a stored uplink transmit power margin having a predetermined range of possible values, the stored value for allowable maximum uplink transmit power increased or decreased by increasing or decreasing the uplink transmit power margin within the predetermined range.

27. (Previously Presented) The method of claim 26, wherein the method commences when the base station powers up and whenever another subscriber station becomes serviced by the base station by initializing the stored uplink transmit power margin to a predetermined maximum value.

28. (Previously Presented) The method of claim 26, wherein the lower of a maximum rated power output of the subscriber station and a maximum rated power output set by regulation is substantially 25 dBm, and wherein the range of possible values of the uplink transmit power margin is substantially -3 dBm to substantially 6 dBm.